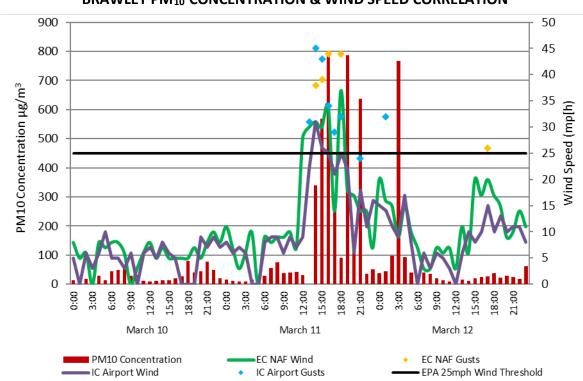
# Appendix C Correlated PM<sub>10</sub> Concentrations and Winds

The following graphs illustrate the direct correlation between wind speeds<sup>1</sup> and  $PM_{10}$  concentrations at select monitoring sites within the Salton Sea Air Basin on March 11, 2016. Note a variety of instruments measure wind speed at different times during any given hour. Therefore, the following graphs reflect the hour of the wind measurement.

### IMPERIAL COUNTY SITES (FIGURES C-1 to C-5)

FIGURE C-1
BRAWLEY PM<sub>10</sub> CONCENTRATION & WIND SPEED CORRELATION

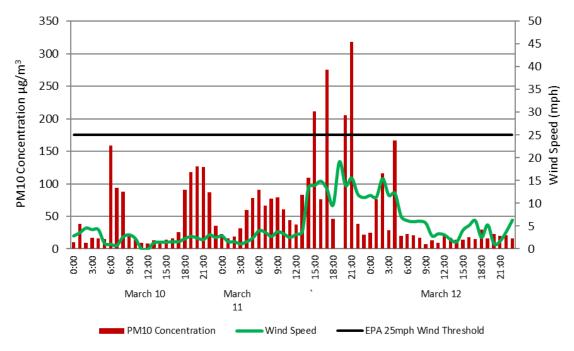


**Fig C-1:** Brawley saw increased hourly concentrations in response to dust being transported downstream. Brawley does not record wind speed data. Air quality data from the EPA's AQS data bank. Wind data from the NCEI's QCLCD system

164

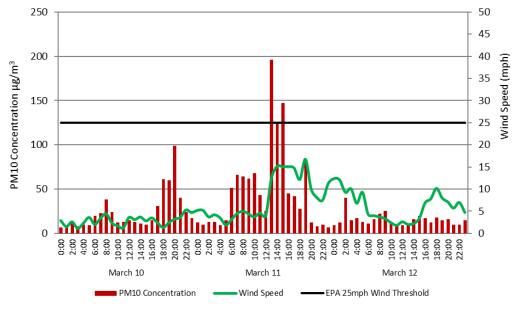
<sup>&</sup>lt;sup>1</sup> National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); <a href="https://w1.weather.gov/glossary/index.php?letter=w">https://w1.weather.gov/glossary/index.php?letter=w</a>

FIGURE C-2 CALEXICO PM  $_{10}$  CONCENTRATION & WIND SPEED CORRELATION



**Fig C-2:** Winds at Calexico station did not reach the 25 mph wind threshold. Air quality and wind data from the EPA's AQS data bank





**Fig C-3:** Winds at El Centro station did not reach the 25 mph wind threshold. Air quality and wind data from the EPA's AQS data bank

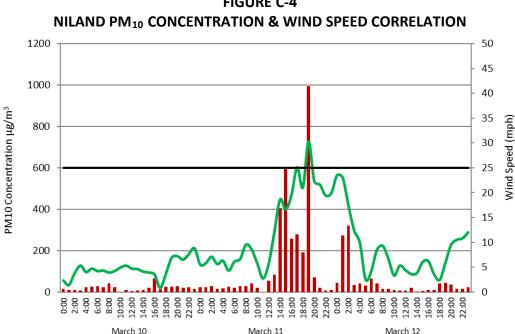


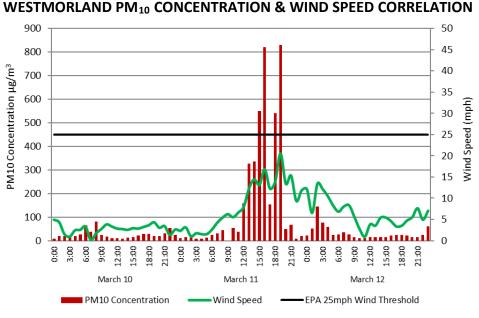
FIGURE C-4

Fig C-4: Winds at Niland station exceeded the 25 mph wind threshold but the monitor narrowly escaped an exceedance. Air quality and wind data from the EPA's AQS data bank

Wind Speed

EPA 25mph Wind Threshold

PM10 Concentration

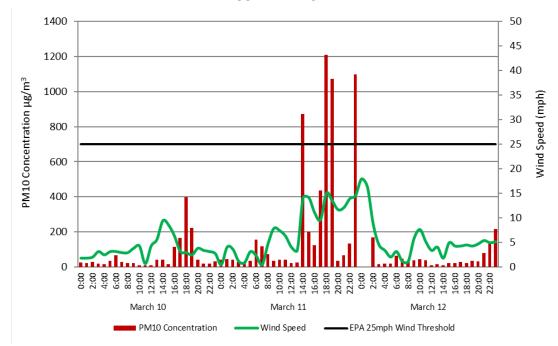


## **FIGURE C-5**

Fig C-5: Winds at Westmorland station did not exceed the 25 mph wind threshold. However, dust suspended by higher winds upstream settled out of the air as lower winds passed over the monitor. Air quality and wind data from the EPA's AQS data bank

### **EASTERN RIVERSIDE COUNTY MONITORING SITES**

FIGURE C-6 TORRES MARTINEZ DESERT CAHUILLA TRIBAL  $PM_{10}$  CONCENTRATION & WIND SPEED CORRELATION



**Fig C-6:** Winds at the Torres Martinez Desert Cahuilla Indians Reservation station did not exceed the 25 mph wind threshold. However, the monitor still recorded elevated  $PM_{10}$  levels. Air quality and wind data from the EPA's AQS data bank

FIGURE C-7
INDIO (JACKSON ST) PM<sub>10</sub> CONCENTRATION & WIND SPEED CORRELATION

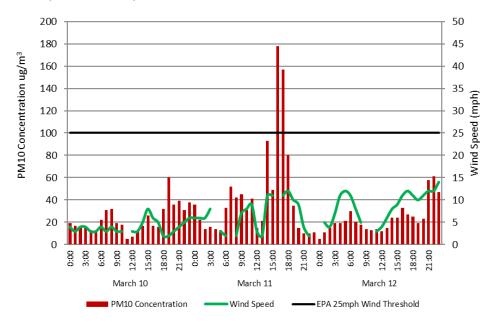


Fig C-7: Winds at the Indio (Jackson St) station did not exceed the 25 mph wind threshold. However, the monitor still recorded elevated  $PM_{10}$  levels. Air quality and wind data from the EPA's AQS data bank

FIGURE C-8
PALM SPRINGS FIRE STATION PM<sub>10</sub> CONCENTRATION & WIND SPEED CORRELATION

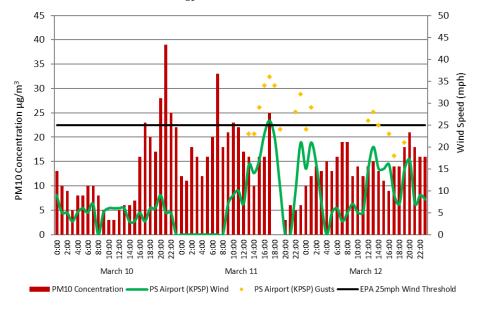


Fig C-8: Winds at the Palm Springs Fire Station did not exceed the 25 mph wind threshold. However, the monitor still recorded elevated  $PM_{10}$  levels. Air quality and wind data from the EPA's AQS data bank

### **SOUTHWESTERN ARIZONA**

FIGURE C-9 YUMA, ARIZONA SUPERSITE  $PM_{10}$  CONCENTRATION & WIND SPEED CORRELATION

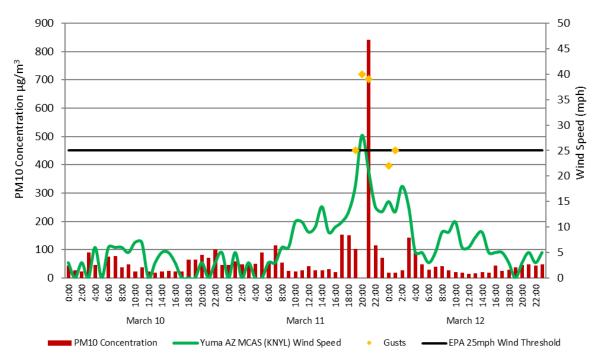


Fig C-9: Yuma Supersite saw a brief rise in  $PM_{10}$  concentrations in response to an increase in winds on March 11, 2016. Air quality data from the EPA's AQS data bank; wind from the NCEI's QCLCD system